October 11, 1996

VIA UPS Next Day Air

Docket Office
California Public Utilities Commission
505 Van Ness Avenue, Room 2001
San Francisco, California 94102

Re: R.94-04-031/I.94-04-032

Dear Docket Clerk:

Enclosed for filing in the above-entitled matter are the original and five copies of the **REPLY COMMENTS OF THE CALIFORNIA ENERGY COMMISSION ON THE AUGUST 30, 1996, REPORT TO THE CPUC BY THE DIRECT ACCESS WORKING GROUP (DAWG)**. Please return the extra copy in the enclosed, stamped, self-addressed envelope. Thank you for your attention to this matter.

Very truly yours,

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Enclosures

cc: Michelle Cooke, CACD (VIA UPS Next Day Air)
Linda Serizawa, CADC (VIA UPS Next Day Air)
Restructuring Service List

BEFORE THE CALIFORNIA PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking The Commission's Proposed Policies Governing Restructuring California's Electric Services Industry and Reforming Regulation	)))))	R.94-04-031 (Filed April 20, 1994)
Order Instituting Investigation on the Commission Proposed Policies Governing Restructuring California Electric Services Industry and Reforming Regulation	)))))	I.94-04-032 (Filed April 20, 1994)

REPLY COMMENTS OF THE CALIFORNIA ENERGY COMMISSION ON THE AUGUST 30, 1996, REPORT TO THE CPUC BY THE DIRECT ACCESS WORKING GROUP (DAWG)

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TABLE OF CONTENTS

INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

The California Energy Commission (CEC) submits its reply comments in response to the August 30, 1996 Direct Access Working Group report, "Design and Implementation of Direct Access Programs" (DAWG Report) and comments on the DAWG Report filed by parties on September 30, 1996.

The CEC urges the California Public Utilities Commission (CPUC) to issue decisions on the following major issues. The CPUC can then assign development of the necessary implementation plans to a stakeholder working group, perhaps the DAWG, for subsequent review, revision, and adoption by the CPUC.

1. Phase-in of Direct Access

a. Phase-in of direct access is not required unless requests to participate exceed technical capacity of Utility Distribution Companies (UDCs) (metering, communication, and billing services) and scheduling coordinators (imbalance cost allocation) to satisfy necessary requirements.

b. As a near term measure to ensure that bottlenecks in the provision of metering and billing services do not delay implementation of direct access, the CPUC should direct the UDCs to increase capacity to provide hourly interval metering, electronic communication of hourly Power Exchange (PX) prices to customers and daily uploads of hourly energy consumption, and billing services utilizing hourly consumption data to those levels reasonably expected for 1998.

c. Stakeholders should be directed to develop a contingency plan addressing selection of participating customers from among a pool of applicants in the event demand exceeds transactions processing capabilities.

2. Customer Participation Requirements

a. No consumer should be allowed to participate in direct access without a specific set of physical and contractual requirements such as those described in the DAWG Report, Section 4.3.2.

b. The standard basis for participation in direct access must be hourly interval energy measurements uploaded daily for use in settlements of imbalance costs and load forecasting.

c. Small commercial and residential customers should be allowed to substitute load profiles for interval meter measurements and electronic data communication system retrieval of these measurements until 1/1/2003.

d. Load profiles, based on sampling of comparable customers with hourly interval meters and electronic data communication systems, must be designed to satisfy accuracy requirements comparable to existing utility load research samples or CEC load research regulations. Specific accuracy standards and requirements for load profiling should be developed by a working group.

e. Customers wishing to change energy providers either from or to the UDC, or from or to a competitive energy supplier, will be required to provide reasonable notice to ensure that meters are read, bills are delivered, final payment is made, and the load forecasts of both the old and new suppliers are adjusted.

3. Treatment of Aggregation

a. Aggregation arrangements should be designed to provide an opportunity for small commercial and residential customers to participate in direct access by

reducing overhead costs of negotiating contracts without shifting costs of service from participating customers to non-participating customers.

b. No geographic or customer class participation requirements should be imposed on private aggregators.

c. The CPUC should direct the IOUs/UDCs to install full metering and telemetry at each point on the grid that the Independent System Operator (ISO) identifies as an ISO grid outake point by 1/1/98 if possible. The data collected at each point shall be made available to all suppliers of end-use customers whose power consumption relates to that grid outake point. Reasonable costs for acquiring and sharing the data should be recouped from non-UDC users.

4. Access to Utility-Held Customer Information

The CEC recommends that the CPUC order the utilities to make their customer data bases available to market participants. Specifically, utility-held customer data is needed in three "packages," each having different customer consent requirements commensurate with the level of customer privacy appropriate for the information. These three data packages should be made available to registered service providers subject to clear, enforceable rules governing the proper use of the data, and at prices that fairly compensate the utilities for providing the data. In addition, utility-affiliated providers must effectively be prevented from having any form of access to utility data bases that is not equally available to other providers.

The three customer information packages and the associated customer consent procedures that the CEC recommends are as follows:

a. Basic information (customer contact data plus metered energy usage) on the vast majority of utility customers, using an opt-out procedure for obtaining customer consent.

b. Complete customer records for those customers who explicitly authorize access to their data by means of an opt-in procedure.

c. Non-personal data (e.g., metered usage plus demographic data, SIC codes, etc., but without customer identification) for all residential and small commercial customers, specifically to support aggregation of these customers using load profiles.

5. Governance of Market Participants

a. All prospective energy service providers should be required to submit the information required by AB 1890, § 394(a), by 7/1/97. The CPUC should then issue an approved list of such providers by 9/1/97, and every 90 days thereafter.

b. Registration requirements and market rules set forth in AB 1890, § 366 and §§ 394-397 must be strengthened. A working group composed of industry stakeholders should be directed to draft additional registration requirements in the form of draft legislation for CPUC review by 4/30/97. Draft legislation should then be submitted to the legislature by 6/30/97 that would take effect 1/1/98.

c. Competitive affiliates should be permitted to compete for customers within the service territory of their related monopoly utility subject to development and enforcement of strict related-entity rules. A working group of industry stakeholders should be directed to develop proposed rules by 3/1/97 for review, revision, and adoption by the CPUC.

d. All retail-related activities of scheduling coordinators must be subject to the jurisdiction of the state of California. The CPUC should form a working group that includes DAWG participants and WEPEX implementation team members to develop and submit draft rules regulating the retail-related functions of scheduling coordinators by 2/1/97.

6. Metering, Communication Systems, and Information Management

a. All customers connected to the distribution systems under the regulatory authority of the CPUC should have hourly interval meters and electronic data communication systems installed by 1/1/2003 through an authorized implementation program.

b. In cooperation with customer representatives, IOUs should be directed to develop a certification procedure for makes, models, and installation configurations of existing submeters that qualify them for direct access revenue metering applications. Customers wishing to have any other meter type or installation configuration qualified should have this opportunity subject to payment of the direct costs of inspection by utility personnel.

c. A stakeholder working group should submit a report by 4/1/97 setting forth development standards, standards of practice, and institutional arrangements to oversee information management, including metering, data communications, updating/maintaining a consumption usage database, billing, and revenue handling for electricity, natural gas, and water industries in California for review, revision, and approval by the CPUC.

7. Unbundling of the UDC Distribution Function

a. The CPUC should adopt the following definitions:

(1) unbundling means the separation of bundled service into separate component services, which are each priced individually and may be offered at one or more levels of service, each level with its own prices, terms and conditions of service.

(2) competitive supply means that a service may be legally provided by a registered energy service supplier which is not the regulated monopoly.

(3) default provider means that entity which is obligated to provide component services to customers who do not arrange services from a private energy service provider.

b. UDCs should be directed to offer unbundled component services for metering, data communications, billing, and revenue processing beginning 1/1/98 to both private energy service providers serving their direct access customers. The UDC's offerings should provide end-use customers seeking different levels of service at different prices, reflecting costs of delivery.

c. The Ratesetting Working Group should be ordered to draft a proposal by 10/1/97 consistent with the above that addresses the following issues:

(1) determination of an ongoing process to respond to customer interest in component services, and the various levels and qualities of service options, to meet those interests;

(2) determination of an appropriate point to permit competitive supply for each component service;

(3) determination of an appropriate component service pricing protocol that is compatible with performance based ratemaking (PBR) design for the distribution function;

(4) the extent to which a default provider is needed for a specific component service to ensure universal service, and options for identifying such a default provider.

8. Consumer Education

a. Consumer education is a prerequisite to meaningful consumer choice. All stakeholders should bear a responsibility for one of more consumer education activities, either during the transition or as part of competitive markets.

b. Utilities, under the general direction of the CPUC, must undertake consumer education programs during 1997 for the purpose of providing general information about industry restructuring, including information addressing direct access and virtual direct access options. An educational plan, funded by the three utilities in proportion to 1996 electricity sales, should be developed in consultation with industry experts and implemented on a statewide basis in manner targeted to various customer classes, ethnic communities, and English-language limited communities.

9. Cost Recovery for Utility/UDC Expenditures

a. Reasonable costs to implement these and subsequent directives of the CPUC to implement direct access and further retail restructuring should be recovered in rates.

b. The Ratesetting Working Group develop a proposal for revenue recovery commensurate with AB 1890 restrictions on prices and rates by 2/1/97.

Below the CEC discusses each of these issues in the context of the various comments filed on September 30, 1996 in response to the DAWG Report and offers a balanced implementation plan for achieving these goals.

I. PHASE-IN OF DIRECT ACCESS ELIGIBILITY

I-1 Is Phase-in necessary? If so, what is the rationale?

There are three basic positions advanced by parties: (1) a three year phase-in described in terms of megawatts of peak demand, (2) no phase-in at all, and (3) an intermediate position that says no phase-in unless solicitation efforts uncovered greater demand than can be accommodated by transactions processing capabilities. The CEC supports this last position, and will offer arguments against the other two.

Phase-in is Essential

Southern California Edison Co. and Pacific Gas & Electric Co., who filed joint comments, (SCE/PG&E) and Los Angeles Department of Water and Power (LADWP) support the position that phase-in is essential, should start with 1800 MW for all of 1998 and be universal by 1/1/2001 by monthly increments of capacity, unless constrained by WEPEX/ISO or the CPUC. Initial proposals for 1999 and 2000 would be subject to refinement by a utility proposal due 6/98 and a joint [WEPEX/ISO and CPUC] decision to "stay the course" or make changes by 9/98.

California Large Energy Consumers Association and California Manufacturers Association, who filed jointly (CLECA/CMA) support a similar position, i.e. phase-in for a first year is necessary beginning with 1800 MW of capacity (residential customers

using load profiling should not count against this limit), and expansion of eligible load should in monthly increments to be completed within three years. California Industrial Users (CIU) and the Energy Producers and Users Coalition (EPUC) support a less extreme position, i.e. that 1998 should begin the period of phase-in, based on some transactions-based capacity, after which all customers are eligible to participate.

Although these parties are unanimous that a phase-in required, they have not offered any technical assessment that specific factors, such as billing processes capacity, or uploading hourly metering readings, or scheduling coordinator data processing capabilities, could provide a transactions-based bottleneck. In the absence of such a showing, the CEC believes that there is no basis for imposing a specific phase-in process at this time.

No Phase-in Has Been shown to Be Required

Direct Access Now (DAN)[1], New Energy Ventures, (NEV), the Office of Ratepayer Advocates (ORAplus)[2], Farm Bureau, the Department of General Services-University of California-California State University joint parties (DGS/UC/CSU), Electric Clearinghouse, Inc. (ECI), and Working Assets support the position that no technical basis for limiting eligibility has been put forward, therefore no constraints should be placed on any customer starting 1/1/98.

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[1] This reference is to the joint comments filed by California Retailers Association, School Project for Utility Rate Reduction/Regional Energy Management Coalition, the California League of Food Processors, the California City-County Street Light Association, Robinsons-May Department Stores, Payless Shoesource, Inc., Sand Diego Gas & Electric Company, Enron Capitol & Trade Resources and the United Stated Department of Defence.

[2] The Office of Rate Payer Advocates filed joint comments with Eastern Pacific and Utility Partnership Solutions.

These parties review the same material described above about technical transactions processing capabilities, but come to the conclusion that no phase-in could ever be required. By presuming that demand for direct access will be relatively low, or that if there are problems they can be solved by various short cut methods, these parties would have the CPUC abandon any efforts to develop a contingency plan for implementation if demand exceeded supply. They also ignore the concepts put forward in the DAWG Report concerning the consequences of major implementation problems, e.g. success guarantee discussions in Chapter 4, Section 4.2.3.

The CPUC cannot afford to encounter the situation in which major promotional campaigns by aggregators result in substantially more demand than transactions-processing can support without a contingency plan that could be quickly implemented. Such a plan should be developed in advance of any customer solicitation phase, and be implemented if and when demand exceeding supply.

Phase-in of Eligibility and Rationing May be Required

The CEC, San Diego Gas & Electric Co. (SDG&E), Utility Consumers' Action Network (UCAN), California City-County Street Light Association (CAL-SLA), and Los Angeles County (LACounty) have put forward similar positions, i.e. that universal eligibility should begin 1/1/98, limited only by technical factors contributing to transactions processing by the UDC or scheduling coordinators. These parties acknowledge that possible necessity for a rationing scheme in the event demand exceeds supply.

Accordingly, the CEC recommends the development of a contingency plan that would be triggered in the event demand exceeds supply. The CEC also recommends that interest in direct access be monitored in order for seamless implementation of the rationing plan. When requests total a certain pre-specified level, the contingency plan would be triggered. The details that such a plan must include are addressed in the

DAWG Report, Chapter 5, and in the September 30 Comments of parties. A contingency plan should be developed as part of the stakeholder working group process that follows CPUC decision on major features of direct access.

Implementation of Direct Access

ORAplus has advanced the notion that direct access should begin even if the ISO is not functional as of 1/1/98. ORAplus recommends that alternative arrangements for system impacts, such as imbalance costs should be developed.

The CEC opposes the introduction of direct access at any time prior to the time when the essential structural elements of the new market, the ISO, the PX, and the scheduling coordinators are in place. These entities are essential to avoid cost shifts from direct access participants to non-participating customers. Such cost shifts would be substantially exacerbated by an inability to identify and cost out system imbalances, use of ancillary services, or recovery of appropriate shares of system dispatch costs applicable to each direct access customer. Rather than create substitute mechanisms to provide a "bridge" until the ISO, PX and scheduling coordinator entities are operational, the resources devoted to developing the "bridge" mechanisms should be devoted to resolving the basic problems delaying the implementation of the new market structure.

I-2 What programs and incentives can be developed for UDCs and others to reduce or eliminate bottlenecks?

Some parties who favor no phase-in recommend that the requirements for participation be increased in order to limit demand. This is essentially equivalent to creating bottlenecks to deal with the demand/supply problem. The CEC does not believe in creating needless hurdles to participation in direct access. Section I-3.1 of

these Reply Comments directly responds to this suggestion. This section addresses how to respond to legitimate bottlenecks.

React to Limitations of UDC Systems by Allowing Alternative Suppliers to Meet These Needs

Since SDG&E has previously announced its desire to unbundle certain metering and billing services, to allow them to be offered competitively, and to privatize its metering and billing capability and compete in such markets, it should come as no surprise that SDG&E suggests that if UDC metering and billing systems are problems, then private entities should be allowed to perform these services. SDG&E already has an affiliate ready to compete in this area.

A related approach is supported by DAN, DGS/UC/CSU. They suggest that if UDC billing processing capability presents a constraint to direct access participation, then the solution is to allow energy service providers (ESPs) to perform billing and remit appropriate revenues to UDCs.

The CEC opposes both of these approaches for the near term of 1/1/98. The CEC is open to either of these possibilities in the future, but at the moment these are functions clearly assigned to the UDC by D.95-12-063, and they should remain assigned as the exclusive responsibility of the UDC until a wide range of unbundling, competitive supply, default supplier, monopoly pricing, and PBR incentive issues are resolved. As set forth in Option 4 of the Ratesetting Working Group (RWG) report, the September 13, 1996 Comments on the report, and in its September 30, 1996 Comments on the DAWG report, the CEC supports unbundling of distribution component services, but continued monopoly supply of these services by the UDC for a transition period.

In a similar vein, DAN and DGS/UC/CSU suggest that if scheduling coordinator settlement with customers on a daily basis presents a data processing constraint to direct access participation, then the solution is to eliminate the requirement that daily

settlement be conducted with end-users and rely upon other allocation techniques for ISO imbalance costs.

The CEC similarly opposes this suggestion. The volume of revenues flowing through direct access may be very large. Mistakes in metering or transfer of information among parties in the initial phases of direct access are possible. Utilities have a legitimate concern that the new data handling mechanisms and protocols may lead to errors. It would be a mistake to allow monthly settlement, especially in the immediate time period, if this were to result in large revenue differences to accumulate over a period of a month, rather than a day. The system should incorporate daily settlement, as proposed by WEPEX/ISO to the Federal Energy Regulatory Commission. If at some point the scheduling coordinator process can take upon itself the "float" for monthly settlements down to the end-use customer, or the liability of non-payments, then this can emerge in the future.

React to Limitations of UDC (or Other) Systems by Expanding Capacity to Process Transactions

SDG&E suggests that identification of the specific problem(s) inhibiting transactions processing should be resolved by expanding capacity for the bottleneck. This approach permits sensible requirements to be defined, and to be continued, but to resolve the bottleneck as quickly as possible by increasing the limiting capacity.

The CEC heartily endorses this sensible recommendation. Developing a transactions processing capability estimate for meter installation, meter data uploading through communication systems, and metered data bill processing is a central analytic activity that must be conducted in the next few months. As part of its initial policy decision for direct access, the CPUC must make crystal clear that UDCs have certain transactions processing responsibilities, and that they should begin every effort to ensure that they are not the source of any bottlenecks. In return, of course, the IOUs require assurance that investments in expanding these transactions processing capabilities will be

recovered. The CPUC should provide direction to expand capabilities in return for expenditure and investment recovery assurances.

I-3 What criteria should be used for allocating customer eligibility or rationing oversubscription if phase-in is required?

Many parties commented on various mechanisms that would be required to allocate oversubscription should there be a phase-in of eligibility. Paramount among these concerns is to ensure representative participation of all customer classes, and to develop a mechanism for how to respond to differential oversubscription or mixed oversubscription and undersubscription for various classes of customers. All of these concerns should be addressed in the contigency plan for direct access oversubscription that we have recommended.

I-3.1 What information is required to participate in direct access?

The DAWG Report clearly communicated the core information requirements for participation in direct access, e.g. hourly interval metering and data communication system capable of uploading hourly readings on a daily basis. While it simply reinforces the premise put forward by WEPEX/ISO in its April 29, 1996 filing with FERC, the DAWG Report identified the need to consider exceptions to the core requirement. The dispute among DAWG participants concerns the scope of these exceptions.

Load Profiling Permanently Acceptable for Small Customers

Working Assets challenges the general agreement that hourly interval meters and appropriate data communication systems should be required for all direct access customers, especially small ones. Working Assets is apparently concerned that such metering may not be beneficial to such customers. Working Assets believes that

interval metering is not needed, but if market economics show them to be advantageous to some customers, they should be installed by that customer.

The CEC opposes a permanent exclusion of small customers because we support universal metering as a state policy goal for all customers. Even if some customers can be shown not to benefit, this is likely due to present subsidies of these customers by other customers. The CEC believes it is of benefit to society as a whole for all customers to be supplied with real time prices for electricity. Universal metering with two way communication systems is the best way to accomplish this end.

CAL-SLA asserts that interval metering is not needed for streetlights and traffic signals since they operate on fixed, known schedules, thus load profiling is permanently appropriate. The CEC is believes that streetlights and traffic signals may be an exception to the general goal of universal metering.

Load Profiling is Temporarily Acceptable for Small Customers

The DAWG Report can be read to support use of hourly interval metering and data communication systems with daily uploads as the standard for data for direct access participants, with load profiling allowed for small customers as a transition measure. In addition, many commenters (SDG&E, ORAplus, DAN, CLECA/CMA-residential only- CIU, Farm Bureau, Payless, DGS/UC/CSU) support load profiling because interval metering (although a desirable policy goal) may take time to implement; therefore, load profiling can be permitted as a transition measure for some customers.

The CEC strongly supports this position. We believe load profiles are an acceptable transition strategy on the road toward universal installation of interval metering. Further, the same arguments in favor of load profiling (with appropriate accuracy requirements) for residential customers also support its use for small commercial customers.

Permit a Transitory Load Profiling Exemption for Residential Customers, but Using a Uniform Load Profile

SCE/PG&E argue that since interval metering (a desirable long term policy goal) will take time to implement, residential customers can use load profiling, but the load profile should be universal for all residential customers within a UDC service area, and should be used by the UDC and aggregators.

The CEC opposes to this suggestion. While SCE and PG&E seem to believe this promotes fairness, this proposal would result in massive cost shifting from one set of customers to another. We have carefully assessed load research data for PG&E, and can demonstrate that multiple load profiles will be required to ensure that variations in location, presence of central air conditioning, and home occupancy patterns are taken into account. To fail to address these basic contributions to variation in load patterns is to shift costs from high cost customers to low cost customers. To impose such load profiles on both UDC customers and aggregation customers is to deny any benefits of participation in direct access. Such a proposal is inconsistent with the strong language of D.95-12-063 endorsing interval meters for the beneficial signals they will provide to customers about the costs of electricity, and to provide them with a choice to shift loads as a cost reduction measure.

I-3.2 Ensuring Direct Access Programs Are Representative or Equitable

Many parties maintain that direct access program participants should be representative or equitable, respectively. Others are satisfied so long as members of all customer classes have a fair opportunity to participate.

Requiring Equal Representation Among Customer Classes

Many parties presume that participation in direct access will be controlled so as to match proportions of underlying IOU customers. CLECA/CMA, CIU, Farm Bureau direct assert that such proportional representation should be based on annual energy consumption. Moreover, The Farm Bureau recommends that any undersubscription not be allocated to oversubscribed classes, since such undersubscription may only reflect the slower pace of response to education programs in those customer classes.

The CEC opposes any "outcomes" interpretation of "representative" or "equitable" direct access programs. We urge the CPUC to direct development and implementation of a process that is equitable by providing a fair opportunity for all customer classes to participate.

Ensuring Direct Access Programs Are Equitable

The CEC and Working Assets propose that participation in direct access should be open to all who meet equipment and contractual requirements. Similarly, LADWP suggests that participation in direct access should require interval metering, except with limited exemptions for well done load profiling that inhibits cost shifting. Rather than developing elaborate "representative" allocations of available capacity, there should be an education campaign addressed to all customer classes. In the event of oversubscription, a lottery should be conducted among the applicants for that particular class. Thus, an "equitable" direct access program offers education appropriate to each customer class and permits direct access providers to offer their services to all customers.

I-3.3 Selecting Participants from Among Applicants When There is Oversubscription

Many parties addressed whether oversubscription rationing should be done. These comments are frequently generalizable even though they were originally placed in the context of a multi-class allocation context.

First Come, First Served

ORAplus, CAL-SLA, and CIU all support a first come, first served approach with special consideration for small customers or for maintaining industry parity where energy costs are a substantial elements of the cost of production among competing plants in California.

The CEC opposes a first come, first served approach. Such mechanisms provide too great an advantage to large customers who are already aware of direct access opportunities. Many small customers have not yet even realized they have this option. Larger customers will have sufficient advantages from their abilities to accommodate overhead costs.

Selection by Lottery

SCE/PG&E ,CLECA, EPUC, Working Assets support use of lotteries in the face of oversubscription. Lottery selection would also ensure that load requests are fully

honored, rather than being partially honored or split between direct access and UDC energy service.

The CEC supports use of lotteries with full customer load at a specific site. A current account is a distinguishable "customer" to the IOUs for billing purposes, thus this should be the basis for selection to participate when, or if, oversubscription is encountered.

Allocation by Prorata Reduction of Requests

Alone among parties, CMA urges that allocation of oversubscription within a class should be resolved by prorata reductions of all desirous participants.

The CEC objects to this approach, because it can readily lead to cost-shifting between direct access participants and non-participants served by the UDC. To develop rules to inhibit these cost shifts is possible, but wasteful of resources, and contrary to reliance upon competitive markets. If customers are willing to engage in hedging exercises to minimize their risk of poor choices, then they should be required to find another direct access provider to use for this purpose, not non-participants served by the UDC.

I-3.4 Other Features of Direct Access Programs

Some parties offered comments on other features of direct access programs.

DAN, CAL-SLA, Payless, DGS/UC/CSU, LACounty, Working Assets commented that existing CPUC limitations (D.95-12-063) on aggregation and floor on individual customer loads are not appropriate. The CEC agrees.

Payless, LA County, DGS/UC/CSU commented that multi-site customers should not be prohibited from aggregating across UDC distribution territories. The CEC agrees.

Western Mobilehome Parkowners Association suggests that residents of master meter mobile home parks cannot impose costs on park owners by seeking direct access. The CEC agrees.

I-4 How should AB 1890's requirement for renewables energy bypass of direct access phase-in be accommodated?

Very few parties commented on § 365(b)(2) of AB 1890. SCE/PG&E propose that such customers can be accommodated within any overall limits of direct access. This appears to mean that such customers move to the "head of the line" if there are technical constraints on direct access participation and therefore limited eligibility.

The CEC believes that a strict interpretation of § 365(b)(2) as written would be impractical to implement. While it might seem straightforward to verify that each individual customer's applying for a phase-in exemption qualifies by having at least 50 percent renewables power, to do so would require verification of individual customer loads which would be extremely labor intensive. Further, Section 365(b)(2) presupposes that such a customer has multiple, simultaneous suppliers of partial customer loads. DAWG report warned against this situation because it creates numerous load forecasting/imbalance cost allocation problems.

An alternative method for implementation of the intent of this statute is development of a process to verify those energy service providers which have generation resources equal to or greater than 50 percent of qualifying renewable technologies as certified by the CEC, according to the forthcoming recommendations of the CEC to the Legislature pursuant to Section 383. Then any customer of such an eligible provider

would be automatically exempt from phase-in. This would be a much simpler matter to accomplish, requiring much less effort than assessing shares of individual customer loads from multiple providers.

II. CUSTOMER PARTICIPATION

Recording of hourly energy use is necessary for cost allocation, settlements and load forecasting. With few exceptions, participants to the DAWG believe that interval metering for all customers is the best way to account for hourly usage, but that full deployment of interval metering by January 1, 1998, is not possible. Thus, the CEC recommends the use of load profiling for residential and small commercial users until universal metering is available. The more controversial issue is whether the IOU/UDC should have exclusive responsibility for metering, or whether other market participants can be involved in the developing market.

II-1 Is Daily Settlement For All Customers Necessary?

Since interval metering with daily upload capability will not be universal by January 1, 1998, daily settlements with all customers will not be possible. The settlement process for small customers will probably be done on a monthly basis as part of the contractual arrangement between the customer's aggregator and the scheduling coordinator. Only DAN commented specifically on the settlements questions: "The ISO settlement process does require that scheduling coordinators settle imbalances daily with the ISO. The ISO does not, nor should it, require the scheduling coordinators to settle with their own customers on a daily basis. The particulars of the transaction between customer and scheduling coordinator is best left to the commercial parties to resolve" (p. 11).

The CEC opposes DAN's suggestion. We believe that scheduling coordinators and their customers, bilateral contract participants and aggregators, should settle on a

daily basis at the beginning of direct access program. Later, once all participants have experience with the process, and a better understanding of the size and cost of imbalances, it may be possible to relax restrictions and let markets determine how to address these issues. This is an example of an element of scheduling coordinator to customer interactions that the state should assert jurisdication, and regulate, at least for a transition period.

II-2 Should load profiling be allowed as a reasonable substitute for hourly interval meters?

DAWG participants generally agreed that load profiling was appropriate for use in aggregating the load of residential customers. The difference of opinion focused on whether load profiling was appropriate for use in aggregation of small commercial load and the development of an appropriate load profile.

PG&E/SCE assert that load profiling in lieu of interval metering is appropriate for residential customers only. CLECA and CMA also support load profiling for the residential class only. CLECA and CMA go on to state, ". . . there is no indication that small commercial customers have common load profiles. Indeed, one can imagine the differences in usage between a restaurant and a dry cleaner. Thus, the likelihood of significant cost shifts between such customers and between them and others is sufficiently high that the program should not be available for their use" (p. 12).

Most other parties believe that load profiling for small commercial as well as residential customers is an acceptable alternative to interval metering. DAN states: "If the Commission permits the use of load profiles for residential and small commercial customers who elect direct access (a position for which there is consensus support),

then the last possible technical barrier to customer participation will have been removed" (p. 20).

The CEC supports the use of load profiling for both residential and small commercial customers until our goal of universal interval metering and communication is reached. The CEC defines small commercial customers as those customers with loads of less than 20 kW, in accordance with § 331(h) of AB 1890.

II-3 What methodologies for load profiling have been recommended?

There is much debate as to the design of an appropriate load profile for an aggregated group of customers. PG&E/SCE, CLECA and CMA believe that a single residential load shape for each of the UDC's franchise service territories would suffice. PG&E/SCE state that "[t]hese profiles would apply to all market participants, utilities and retail energy providers alike" (p. 13). SDG&E urges the CPUC to "accept a few, simple load profiles as a bridge to universal metering and . . . [to] resolutely refuse to allow parties to transform the need for load profiles into a more regulatory paralysis" (p. 24). These comments suggest that the residential class is very homogenous in its daily use patterns and that the cost of serving members of the class does not vary based on location, end-use saturation, or home occupancy patterns. The CEC disagrees. A single homogenous load profile will serve as a obstacle to the very objective its introduction is meant to accomplish: participation of residential and small commercial customers in direct access.

Figure 1 displays the average weekday summer load shapes for residential customers in climate zone 3, the inland valley region of PG&E and climate zone 5, the San Francisco Bay region. The air-conditioning portion of the load shapes are from a Lawrency Berkeley Laboratory project sponsored by PG&E and the CEC based on

load research data provided by PG&E. The non-conditioning load shapes are from various load research projects sponsored by the utilities and the CEC. The load shapes are used by the CEC to forecast peak load in accordance with its responsibilities pursuant to § 25300 et. seq. of the Public Resources Code. Both of the regions use the same set of load shapes for non-conditioning end-use. Therefore, the difference between the load profiles reflect the difference in the air-conditioning load profile. Figure 1 reveals that the load shapes are quite different. And the difference between these load shapes have an impact on the cost of service. In a restructured industry the cost of serving a particular customer or aggregated set of customers will depend on the hourly loads of the customer or customers and the corresponding electricity prices in those hours.

Figure 2 displays the difference in the cost of serving the average customer in these two regions assuming a peak price of 32¢ from 1 p.m. to 6 p.m., an off-peak price of 8¢ from 7 a.m. to 1:00 p.m. and 6 p.m. to 10 p.m., and a super off-peak price of 4¢ from 10 midnight to 7 a.m. Whether these prices are correct or not is unimportant. The fact is that Power Exchange prices will vary over the hours of the day. Moreover, if

PG&E/SCE are correct and differences in load shapes do not matter, then the cost of serving these customers would not vary. But they do. In the five to six o'clock hour, the cost of serving the average residential customers in Fresno is 64.6¢; in contrast, the cost of serving the average residential customer in San Francisco is 47.3¢. The difference of 17.3¢ would quickly add up. Aggregation of 20,000 customers in the San Francisco region, using a Fresno load shape would result in a $3,400 charge if aggregator had an average customer imbalance of 1.47 kW in the five to six o'clock hour.

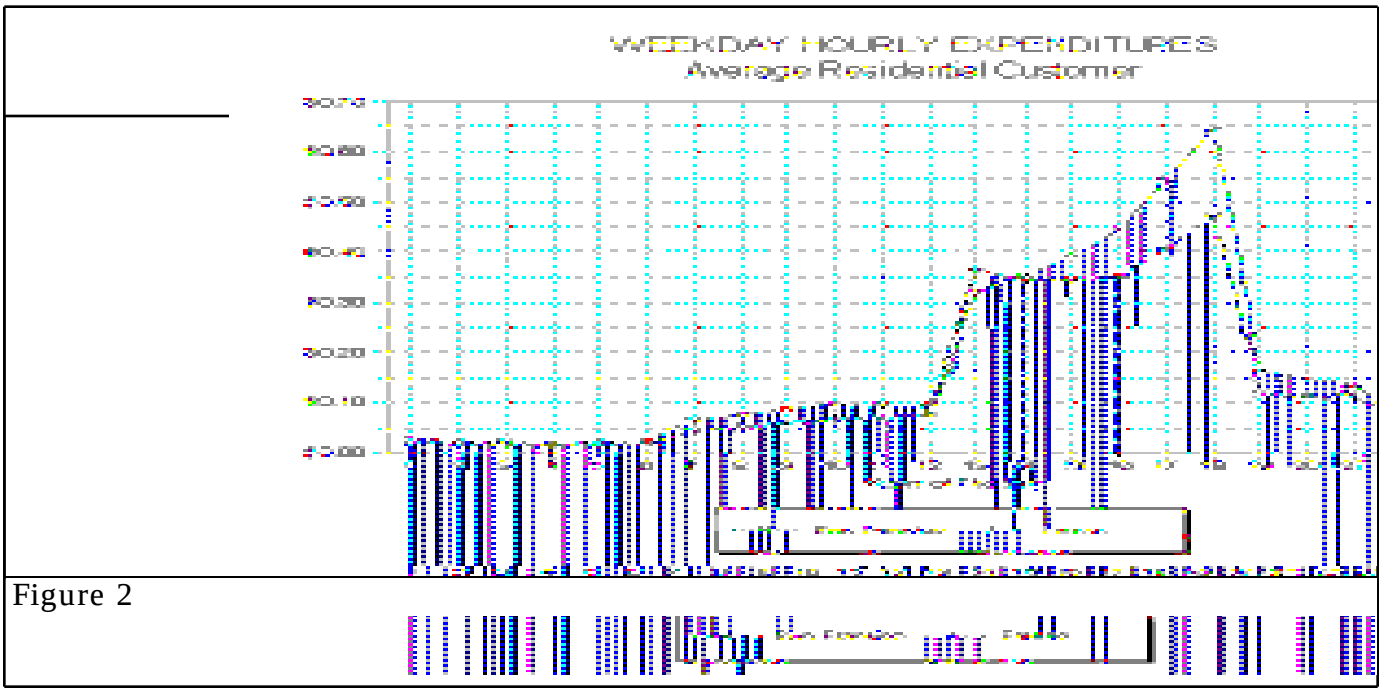

Figure 2

Figure 1

Load profiles should reflect the differences in the likely loads of various groups of aggregated customers. The CEC recommends, that initally there be a set of load profiles based on existing load research data that aggregators can use to reflect differences in location, end-use saturation, or home occupancy patterns. Once samples have been installed and aggregated, a statistically accurate load profile for these customers has been developed, these initial load profiles should be abandoned.

II-4 Utility provision of data and load research to support load profiling.

In order to develop load profiles, data has to be analyzed. The utilities are the default holders of load research data. As of January 1996, PG&E was metering approximately 900 residential sites and 1,165 commercial sites, collecting and storing data at 15 or 30 minute intervals.[3] As of January 1996, SCE was metering approximately 600 residential sites, 400 Non-demand General Service sites, 600 Demand General Service sites and 85 Time-of-use General Service sites, collecting and storing data at 15 minute intervals.[4] The CEC believes that this data should be made available to some entity in order to develop load profiles of residential and small commercial customers that reflects differences in location, end-use saturation, and home occupancy patterns.

II-5 Customers switching providers (UDC and/or others) need to give reasonable notice.

The need to give reasonable notice before changing providers appears to be a consensus item. SDG&E states, "Consumers should be able to change their service provider whenever it is convenient for them, subject only to two limitations: First, there is a small lead time that distribution companies will need on order to change records to reflect the change of service provider. SDG&E sees no reason why this period needs to be longer than 30 days. Second, to the extent that a consumer may be contractually bound to a particular retailer, the consumers ability to change retailers will be determined by the terms of that agreement" (p. 19). SDG&E is also concerned that customers might game seasonal prices in UDC tariffs. "The solution to [this] problem is to ensure that tariffs reflect monthly rates that are aligned with the actual cost at the

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[3] Source: Data Collection and Analyses Plan 1996 - 1998, submitted July 1995.

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[4] Source: 1995 Data Collection and Analyses Plan 1996 - 1998, submitted September 1995.

time of service, as should happen in any event through the use of Power Exchange pricing, and eliminate tariffs that attempt to average this cost over a longer period" (p. 20). The CEC supports these positions. Moreover, consumers should not be restricted to a once a year subscription period, or forced to remain with a service provider or the UDC for a minimum period.

III. AGGREGATION

III-1 Aggregation must avoid cost-shifting between customer groups.

If load profiling is to be used as a transaction cost reduction method thus allowing direct access to reach the residential and small commercial customer it must be designed so that cost-shifting between customer groups does not occur. SCE/PG&E believe that using an average residential load shape will prevent gamesmanship on the part of the UDC and aggregators. However, the CEC does not believe that gamesmanship of this sort is the problem. A single residential load shape will certainly prevent gamesmanship, but it will continue to shift costs from low cost users (high load factor customers) to high cost users. The CEC believes that loads shapes must reflect the costs of serving the aggregated customer group. This can best be done by interval metering of statistically significant portion of the aggregated group and using the sample load shape for cost allocation and settlement purposes.

III-2 Geographic or customer class requirements imposed on private aggregators.

Aggregation should not be limited to geographic regions or classes of customers. SDG&E notes: "There is no reason to limit aggregation. To the contrary it should be encouraged. Surprisingly, the DAWG Report includes a number of proposals to limit aggregation. These include phase-in rules that would place narrow limits on how many or few megawatts can be aggregated. Additionally, some propose to limit where

aggregators may obtain customers, while other would limit aggregation to 'strong affinity groups'. These proposals provide no convincing rationale for restricting consumer choice and must be rejected" (pp. 21-22).

The CEC supports this position. Aggregators should be able to aggregate customers across geographic regions and customers classes. However, limits should be imposed on how these customers are metered. When aggregating across classes of customer or regions the homogeneity of the load is loss and profiling is no longer an acceptable means of allocating hourly usage. Such aggregation will require the use of interval meters.

IV. ACCESS TO UTILITY-HELD CUSTOMER INFORMATION

IV-1 Parties' Comments

Parties commenting on the DAWG Report addressed several aspects of access to utility-held customer information. In general, parties' positions lie somewhere on a continuum between maximizing the free-flow of information to facilitate the competitive market and maximizing consumer privacy protection. In addition, the positions reveal a second concern, namely minimizing the burdens on the utilities with respect to costly information gathering and dissemination activities and the desire to retain control of this information as proprietary. Because of this latter concern, IOUs tend to emphasize customer privacy issues.

Commenters discussed five issues:

1. Should the IOUs be required to make their customer data bases available to qualified retail providers? Some form of an affirmative answer is offered in the comments of PG&E/SCE, SDG&E, CEC, ORAplus, UCAN, Enova, ECI, Farm Bureau, SESCO, CIU and NEV. These parties differ widely, however, on the specifics, as comments on the following questions demonstrate.

2. How should customer consent be obtained? All parties commenting on this issue acknowledge the need for some protection of customer privacy. Two basic approaches exist: strong customer consent procedures, or relatively weaker consent procedures backed up by rules and enforcement mechanisms governing use of the data. PG&E/SCE, UCAN, CIU, NEV and LADWP argue for strong consent procedures, specifically an ***opt-in*** procedure which would require that customers give explicit permission for their data to be released.

CEC, SDG&E, Enova and SESCO argue for a weaker consent mechanism, whereby customer data would be released unless a customer explicitly refused to allow its release. These parties see the combination of weaker consent plus strong, enforceable rules governing uses of the data as the way to optimize the trade-off between facilitating the market and protecting privacy. The parties differ somewhat on the specific data that should be released under on opt-out mechanism, with CEC arguing for a narrow set of variables and SESCO arguing for broad information access, based on its experience with broad information access resulting in little customer dissatisfaction as a provider of demand side management (DSM) services.

3. What information should be released? PG&E/SCE argue for "basic customer information" as in the CEC Package [1] recommendation. They oppose requirements to release aggregation studies or market analyses or personalized energy-use profiles for customers on the grounds that these would be too costly to produce. LADWP opposes any requirement to release "personal, sensitive and proprietary information," but does not say specifically what information falls into these categories. SDG&E,

SESCO and Enova argue for access to utility databases of customer information, and do not specify any particular elements of this data to be excluded from access.

4. How should utilities be compensated for providing customer information? PG&E/SCE say that customers should be able to obtain or release their data twice per year at no cost. NEV also argues that information access should not cost customers anything. SDG&E wants utilities to be compensated for the incremental cost of any data release. The CEC supports fair compensation, to be determined, to utilities for fulfilling the requirements of information access.

5. How can utility affiliates be prevented from having unfair access to utility customer data bases? Both ORAplus and NEV assert that it is not possible to prevent such access, and that therefore utility affiliates should be precluded from competitive market activities in their home territories. The CEC also expresses concern about the enforceability of restrictions on information access by affiliates, particularly because much of the basic market research has already been occurring in anticipation of competition. This issue is addressed in Section V-3, below.

IV-2 Access to Utility-Held Customer Information: CEC Recommendation

Package [1] Basic Customer Information

As noted in D. 95-12-063, the success of the competitive market requires that all competitive providers have equal access to basic customer data that currently exists in utility data bases. This requirement is particularly important for enhancing small customer participation in the market. By basic customer data we mean customer contact information (name, mailing and service addresses, telephone and utility account number) plus at least one year's metered energy usage. Basic data on nearly

all small customers should be made available to all registered providers, in a manner that best supports healthy competition while protecting customer privacy.

To achieve this objective, the CPUC should direct the utilities to obtain customer consent using informative bill inserts accompanied by a prepaid return postcard that enables customers to ***opt out***, i.e., to refuse to allow their data to be released. The utilities should then prepare a data base that includes all those customers who did not opt out, for release to all registered providers at a price that fairly compensates the utilities for preparing and distributing the data base. As a further safeguard of customer privacy, the recipients of the data base would have to agree to refrain from specified undesirable marketing practices and from disseminating the data to other parties. To enforce this agreement, the CPUC should create a process for resolving complaints and assessing penalties for violations.

An opt-out mechanism is likely to result in 80 to 90 percent of customers being included in the data base, whereas an opt-in mechanism (i.e., requiring explicit customer consent to release the data) is likely to result in only 10 to 20 percent, based on the dominant tendency of customers not to respond. The procedure described above, particularly the use of opt-out consent to release basic data, is appropriate for basic customer data for the following reasons:

From the customer-protection viewpoint:

1. The information in question is not sensitive; that is, there is little or no potential for harm to customers if, for some reason, they fail to take advantage of the opt-out opportunity.

2. Customer contact information is readily available elsewhere, although it may be more costly if new competitors have to create their own data bases. Moreover, given

standard practices in the direct mail industry, customers have little or no basis to expect that this data should be protected from dissemination.

3. The additional safeguards specified above will adequately protect customer privacy interests by penalizing providers who use the information in an unauthorized manner.

4. The more inclusive data base that would result from opt-out will reduce intrusive marketing practices by giving providers the opportunity to screen customers they want to serve without having to make an initial customer contact.

From the competitive-market viewpoint:

5. An opt-in data base cannot accomplish "equal access" to customer data because only a small percentage of customers will be included in the data base. Without a broadly-inclusive data base that opt-out would provide, there is no way to create an "informationally-level" playing field for all competitors. Utility affiliates cannot realistically be prevented from having access to this data, because: (1) personnel will move between the utility and its affiliate and will take their knowledge with them; and (2) it is already too late to prevent such access, as the utilities are already doing market research using their own data bases in anticipation of competition. Equality of information access to competitors is a necessary, although not sufficient, requirement for utility-affiliate marketing activity in a utility's franchise area.

6. Some parties argue against opt-out because they wish to provide maximal privacy protection to economically-disadvantaged or English-limited communities. Ironically, a failure to release data on these customers may have a negative effect on them by making it too costly for firms to aggregate in these areas. If the competitive market is indeed supposed to benefit small customers, the CPUC should give considerable weight to the objective of facilitating broad participation in that market, as long as adequate projections are in place to ensure appropriate business behavior.

Package [2] Complete Customer Records

Customers have traditionally had the ability to authorize third party access to their account information in utility data bases. Such information includes DSM program participation, energy audits, end-use and appliance surveys, credit and billing histories and demographic data, in addition to the basic data described above. The purpose of our recommendation at this time is to allow as many customers who so desire to make these more detailed records available to all competitive providers, in a way that minimizes the burden on the utilities.

For example, customer consent for package [2] can easily piggy-back on package [1]. The same bill inserts that inform customers about their right to opt-out of package [1] can also inform them of the opportunity to opt-in to package [2], and the same return postcard can allow them to express their preferences on both packages. Moreover, because of the clearly delimited time frame for this effort, the utilities will be able to create package [2] in a batch manner rather than release customer records on a case by case basis.

Package [3] Non-Personal Data for Load Profiling

Assuming the CPUC authorizes the use of statistical load profiles in place of interval-metered data to facilitate aggregation of small-customer loads, aggregators wishing to serve these customers will need access to non-personal load data to assess market niches and develop their business strategies, particularly in light of the CPUC's preferred load profiling methodology which they may or may not be able to play a role in developing. To support the efforts of aggregators who serve small customers, the utilities should release a data base consisting of metered usage data plus customer characteristics (climate zone, county, demographic data for residential, SIC for businesses, etc.), but without any customer identification or contact information.

V. GOVERNANCE OF MARKET PARTICIPANTS

V-1 Registration Requirements

Parties' views on registration requirements generally fall into two camps. One group of parties, including SDG&E and New Energy Ventures, generally view the minimal registration requirements set forth in § 394 of AB 1890 to be adequate. The other group, which includes PG&E/Edison, Working Assets, UCAN and the CEC, believe there is a need for requirements beyond those specified in AB 1890. However, parties are in virtually unanimous agreement concerning the need for energy service providers to be subject to a bonding requirement, or other equivalent evidence of financial integrity.

Parties in the latter camp offered a variety of views. PG&E/SCE maintain that the registration and oversight function should include periodic review of the structure and financial health of registered providers. Working Assets recommends that the CPUC adopt registration requirements similar to those imposed on telecommunications providers. UCAN recommends "licensing" of energy services providers.

The CEC agrees that the registration requirements specified in AB 1890 must be expanded to include evidence of financial soundness. The CEC also believes that the registration requirements should include other business information, as discussed in its September 30, 1996 Comments. Moreover, the CEC maintains that the entity charged with the responsibility for registration of energy services providers must have the statutory authority to: (1) enhance the registration requirements through an investigation and rulemaking; and (2) to suspend the registration of an energy service provider upon a finding that the entity fails to meet the registration requirements or has violated a rule warranting suspension. However, since the legislature has spoken on this issue, it would appear that the CEC's proposal cannot be accomplished except

through amendment of AB 1890. The CEC urges the CPUC to adopt its proposal and direct interested parties to draft legislation for CPUC review and approval to pursue a legislative amendment as described.

V-2 Market Rules

Parties offered a variety of opinions as to the advisability of developing industry specific market rules, in addition to those already specified in AB 1890, to govern the behavior of energy service providers. Several parties, including DGS/US/CSU, PG&E/Edison and UCAN, support the development of a code of conduct. UCAN specifically endorses DAWG § 6.5.2.8, but is opposed to CPUC oversight. LADWP recommends that the CPUC should have continuing oversight for utilities and non-utility ESPs and supports the development of market rules to ensure system reliability, safety and fair competition, including a low cost dispute resolution option.

At the other end of the extreme, the Electric Clearinghouse urges that regulation should be limited to that which is necessary to insure reliability. New Energy Ventures appears to agree, but recommends rules that would prohibit UDCs from discriminating against direct access customers.

Working Assets urges the CPUC to adopt market rules similar to those developed for the telecommunications industry and supports energy service provider disclosure requirements. SDG&E supports the ability of customers to change their provider (unless buyer and seller agree to specific term), subject to no more than 30 days' notice to the existing provider.

The CEC supports the development of a Code of Conduct as set forth in § 6.5.2.8 of the DAWG report and recommends that the CPUC direct the working group to draft such a code of conduct. The most critical need that must be addressed, however, is the development of related-entity rules, discussed immediately below.

V-3 Affiliate Activities

Whether competitive affiliates of monopoly utilities should be allowed to compete in the related utility's service area was the most widely commented on governance issue discussed in the first round of DAWG Comments. New Energy Ventures and ORAplus assert that competitive affiliates should not be allowed to compete in the utility's service area. New Energy Ventures urges that this prohibition should persist throughout the five year transition period. ORAplus recommends a two year prohibition.

All other parties who commented on this issue believe that affiliates should be allowed, **conditionally**, to compete in their related utilities' service territory. All the proposed conditions are intended to ensure that competitive affiliates would not be able to take unfair advantage of their relationship to a related utility monopoly.

One proposal, supported by ENOVA, SDG&E, conditions affiliate competition within the related utility's service territory upon three factors: (1) the utility must unbundle non-monopoly services and offer competitors the opportunity to provide these services; (2) utility must offer consumer data bases (except for information protected by contractual arrangements); and (3) the utility will not act as a marketing arm for its competitive affiliate. DGS/UC/CSU offers a similar proposal. These parties support allowing affiliates to compete in the service territory of a related utility provided stringent rules of conduct to avoid cross-subsidization and unfair use of customer information with strict enforcement and penalties. FERC standards re transmission owning utilities should be extended to retail merchant activities of affiliates. However, this support is contingent on UDC unbundling of billing and metering services and the enforcement of mechanisms to ensure compliance with related entity rules.

The CEC supports allowing affiliates to compete in the service territory of a related utility provided stringent rules of conduct to avoid cross-subsidization and unfair use of customer information with strict enforcement and penalties. The CEC also supports unbundling of the UDC function. However, the CEC does not agree that competition should be conditioned on unbundling, and allowing competitive supply of, the UDC function. As set forth in its September 12, 1996 Comments to the Ratesetting Working Group on Unbundling, the CEC urges the CPUC to initiate the unbundling process now to develop on a parallel track with implementation of Direct Access. Thus, the CEC is an ardent support of unbundling. Nevertheless, the reality is that unbundling of the UDC function will not be complete by January 1, 1998. The CEC believes that it is more important that consumers have as wide a choice of provider as possible, provided the strict related-entity rules and enforcement mechanisms are in place. The CEC wants to emphasize, however, that the CPUC should be prepared to devote substantial resources to ensuring compliance. Mere rules on paper will not be sufficient.

The CPUC should direct the working to develop the related entity rules. As a starting point, parties should review 18 C.F.R. § 37.4, related-entity rules applicable to transmission owning utilities, and the CPUC's Holding Company Decision for SDG&E, D. 95-12-018, as recommended by DAN.

V-4 Scheduling Coordinator

V-4.1Regulation of the Scheduling Coordinator Function

The DAWG report describes several alternative views of regulation of the scheduling coordinator, reflecting a lack of consensus among the parties. In its September 30 Comments, CIU suggests that scheduling coordinator regulations should discriminate between those undertaking the function on their own behalf, and those operating in a "professional services" capacity for others.

ECI and Working Assets assert that there should be no limit on the number of scheduling coordinators, merely minimal certification requirements, so that customers have choices of scheduling coordinators.

The CEC supports state regulation of the retail-related activities of scheduling coordinators and recognizes that the extent of regulation may be different for scheduling coordinators serving large customers (and/or large customers who act as their own scheduling coordinator) as opposed to those serving small commercial and residential customers. The CEC believes that aggregators of residential and small commercial customers, however, should not be allowed to serve as scheduling coordinators.

The need for regulation of the retail-related functions of scheduling coordinators is an issue that the IOU members of WEPEX are, apparently, unwilling to consider. This has recently been confirmed in exchanges among WEPEX/ISO Business Rules and Protocols definition team members. Accordingly, the CEC urges the CPUC to assert jurisdiction on behalf of the state of California and direct a working group that includes DAWG participants and WEPEX participants to draft rules regulating the retail-related functions of scheduling coordinators.

V-4.2 Role of ISO Grid Interface Metering Data to Facilitate Imbalance Allocations by the Scheduling Coordinator

UCAN and ORAplus assert that transmission/distribution (T/D) interface metering should be installed to aid allocation of imbalance costs among aggregators and to reduce cost shifting between aggregation customers and UDC customers. Working Assets, on the other hand, opposes installation of upstream metering, because it implies geographic aggregation.

The CEC supports full metering and telemetry of all ISO grid interface points, and access to this information by scheduling coordinators, aggregators, and UDCs. We believe that this source of data should be used as the basis for allocating overall system imbalance costs to groups of customers receiving power through a common grid interface point. For those customers whose loads are not metered at the premise, the grid outtake point becomes the single known data point. Individually metered customer loads could be subtracted from this known control total, with the result being the collective load of all non-interval metered customers. Scheduling coordinators would need to use estimation techniques to allocate this residual load among non-metered customers. The absence of such metering data for each ISO grid outtake point would make this process of imbalance determination and imbalance cost allocation far more subject to conflict, disputes, and arbitrary rules. This metering information will also serve to provide much better estimates of transmission and distribution system losses for customers taking service at different voltage levels.

VI. METERING, COMMUNICATION SYSTEMS, AND INFORMATION MANAGEMENT

VI-1 Universal Interval Metering

All metering, communication systems and standard setting efforts should be guided by a clear understanding of the relationship of these efforts as part of an information management system. Several different entities must have access to customer comsumption data in order to accomplish the is commercial or regulatory interests.

Parties disagree as to whether universal interval metering (UIM) should be required. CLECA, CMA, LACounty, ORAplus, Working Assets, CAL-SLA are against requiring universal interval metering on the basis that it is too expensive. They offer the use of load profiling as an alternative to UIM, although these same parties acknowledge that UIM is more accurate, more desirable, and offers the best alternative for daily settlement and collection of revenues. (CAL-SLA, however, is in a unique position that, perhaps, should except them from the UIM requirement, due to the manner which street lighting is connected to the distribution network, the fact that it is not normally metered today, and street lighting is a predictable resistive load that does not vary by occupancy, weather, climate or location).

Parties favoring UIM support it because it is more accurate, more desirable, and offers the best alternative for daily settlement and collection of revenues. These commenters note that parties concerned about the costs of metering being too high fail to account for the inevitable cost reduction that will occur through volume purchasing (and, ultimately, automatic meter reading). Parties concerned about the high cost of metering also fail to discuss the cost of establishing load profiles and maintaining, verifying and updating them. Electronic automated processes are considerably less expensive, over the long term, than labor intensive processes. Automatic meter

reading of universal interval meters will be less expensive that developing, maintaining and updating load profile, which will be very labor intensive.

For example, the probable scenario for determining and continually maintaining an accurate load profile requires substantial proportions of customers to be metered (perhaps as many as 10%). This data will be uploaded for standard billing purposes and then transferred to a technical analyst to be developed into a typical load profile for both weekdays, weekend days, and any holidays. These load profiles are then analyzed for statistical accuracy by a trained statistician. The load profile then must be compared to the contracted pricing agreement so that proper settlement can be made. Disagreements that arise due to human error or other misunderstandings will need to be traced back to their origin to settle any dispute. The cost for using these highly trained personnel for load profiles can be much greater than the cost of installing UIM. If the cost for a universal interval meter is $450 dollars per meter (worst case estimate) the break even point for load profile analysis will be $4,500 for the equivalent meters of UIM (assuming 10% sampling rate). It should be pointed out that the UIM costs is mostly a one time expense while the load profile analysis is an ongoing cost. Also note that the load profile metering sample must be periodically adjusted to ensure statistical accuracy for the aggregated load profile population.

Moreover, for dispute resolution purposes a certified sealed meter is easier to verify as accurate than a humanly derived statistical load profile. In the event of a billing conflict small commercial customers and residential customers should have more faith in a certified meter than in the use of load profiles.

The CEC supports UIM for all customer classes (except street lighting) as a policy goal. Street lights can be calculated since they are generally engineered to be constant current loads requiring special transformers and do not vary in their operation. UIM may be less costly and more accurate, resulting in fewer problems regarding proper billing verification than load profiles, and has substantial customer

and societal benefits of transmitting price signals. Load profiles should only be used for the transition period prior to installation of UIM.

VI-2. Standards Working Group

The CEC supports the adoption the formation of a working group to develop the open standards and communication protocols that will enable a level playing field for present and future direct access equipments manufacturers. Such a working group appears to be universally desired by the commenting parties. The arbitrary selection of a communications protocol without input from various parties regarding the implementation of such protocol may lead to a mediocre system with compromised performance. Some parties have indicated that Transmission Control Protocol/Internet Protocol (TCP/IP) could be implemented as a communication protocol. Other protocols, however, may be more suitable. Moreover, the security issues have not been identified or adequately addressed. Encryption methods need to be defined and the level of protection needs evaluation. As an example Netscape used a 40 bit encryption method that was thought to be secure yet was broken in two days by hackers. The Dept. of Defense Encryption Standard requires 56 bit encryption and is considered only marginally secure. A 128 bit encryption scheme would probably be secure with present technology for the next 30 years. This issue and other issues need to be considered. TCP/IP covers only the 3rd and 4th layer of protocol. The higher levels need to be determined along with the physical interfaces. Fast Ethernet, Syncronous Transfer Mode, Fiber Distributed Data Interface, and Frame Relay are all backbone technologies that need to be explored for adoption. There are many issues that need to be determined. Otherwise defacto monopolies may result, interoperability may not be available and depth of choice will not exist.

The working group process is superior to a formal cycle of utility applications, testimony from ORAplus and intervenors, and cross examination. In keeping with the DAWG Report Chapter 1, Section 1.3, there are substantial benefits from providing

final decisions on key elements, and from providing explicit direction to a working group which will permit its deliberations to be concluded successfully.

VII. UNBUNDLING OF THE UDC DISTRIBUTION FUNCTION

The UDC's responsibilities (generally described as the distribution function) as defined by D.95-12-063 includes all distribution and customer services now undertaken by the IOU, and potentially new services required in order to implement restructuring, e.g. collection of a competition transition charge (CTC) and remitting appropriate amounts to the infrastructure Bank. While the responsibility to address this topic is assigned to the Ratesetting Working Group, with Commissioner Duque as the Assigned Commissioner, the DAWG parties grappled with this issue since many believe that some degree of unbundling is essential to successful implementation of direct access for smaller customers.

VII-1 Framing the Debate of Unbundling and Competitive Supply

Despite the efforts of the DAWG and RWG as set forth in their reports of August 30 and August 26, respectively, most commenters frame the unbundling debate in very naive ways. The terminology they use to make their points is ambiguous and the arguments they offer tend to be based on philosophical grounds. For purposes of this discussion, refer to the definitions of unbundling set forth in the Introduction to these Reply Comments.

Specificity of Component Service Descriptions

Many of the parties refer to metering and billing, without defining these terms. In actually, the set of services encompassed by these terms is very complex. The DAWG report attempted to elevate the importance of a data communication systems, which raises public policy concerns different from, yet closely related to, metering. Yet few

parties distinguished between metering and data communication systems in their September 30 comments.

The CEC supports further assessment of competitive supply of component services which builds upon the preliminary effort contained in the DAWG Report, Chapter 8, Section 8.7. As we noted in our September 30 Comments, resolution of unbundling and competitive supply of these services should be made in the context of information management. It is essential that the CPUC recognize and make decisions in the context of shared, multiple uses for the same information. For example, the identical data on hourly loads will be used by the ESP, to compute an energy services bill, and the UDC, to compute the appropriate distribution charge, CTC and public purpose surcharges. When advocates for competitive supply of these service, assert that duplication of services will occur without unbundling and competitive supply, they fail to acknowledge that both ESPs and the UDC have legitimate needs for the same information.

Five highly related services -- metering, data communications, updating and maintenance of customer usage databases, bill preparation, and revenue handling and remittance processing -- were identified in the DAWG report and our September 30 Comments. In our DAWG Comments we asserted that all five of these services are candidates for unbundling, but that none of them ought necessarily be offered for competitive supply by 1/1/98. We believe that two of these -- bill preparation, and revenue handling and remittance processing -- are the most likely services in which an energy service provider would like some optional or customized treatment to ensure that the customer understands his relationship with both the UDC for distribution services and the energy service provider for energy services. If anything should be unbundled in the near term, it is these specific pieces of the whole complex from metering through revenue handling.

VII-2 What is the scope of unbundling/competitive supply that must be implemented by 1/1/98 to ensure direct access is successful?

There are three basic positions that parties have put forward with respect to what should be accomplished by 1/1/98: (1) unbundling and competitive supply of metering and billing services, with provision of default service by the UDC, (2) no unbundling/competitive supply, and (3) unbundling without competitive supply. The CEC supports the third position.

Unbundling/Competitive Supply/Provision of Default Service by UDC

SDG&E and UCAN urge that energy, tailored metering, consolidated billing, energy efficiency, and additional services such as consolidated gas billing should be unbundled and provided competitively. Similarly, NEV, DAN, Enova Energy urge that meters, billing, and other service elements must be separated from the bundle to provide maximum consumer choice, and to provide a basis for UDC pricing for these services.

ORAplus believes that unbundling of any and all aspects of "marketing" is essential for a competitive market in generation services; therefore, unbundling customer information, metering, billing, etc. is essential to efficient provision of direct access. Perhaps somewhat less specifically than other parties, CIU, EPUC, and LACounty believe that unbundling and competitive supply of metering services (meeting appropriate standards) is important, but they do not directly argue for implementation by 1/1/98. As noted above, ENOVA Energy and DGS/UC/CSU recommend that unbundling and competitive supply of metering and billing be a precondition to permitting utility affiliate marketing in the utility service territory.

The CEC opposes these calls for immediate unbundling and competitive supply of metering and billing. The CEC believes that competitive supply of a substantial share of UDC distribution function component services is ultimately likely, but the path to achieve this is not so clear as proponents have suggested. The CEC is not convinced that both unbundling and competitive supply of any particular service has been demonstrated to be *essential* to the implementation of direct access.

Defer Any Unbundling/Competitive Supply Beyond 1/1/98

SCE/PG&E and LADWP urge that no unbundling be permitted by 1/1/98, so if customers and their suppliers wish specialized metering will be on the customer side of the UDC meter. These parties urge the development of metering standards to ensure no interference with UDC services. Further, SCE/PG&E urge that during a transition period, the UDC continue to bill and collect for its services, but that the UDC have the option to perform consolidated billing for an ESP. In the longer term, an ESP may perform consolidated billing provided it meets certain requirements.

The CEC opposes this categorical denial of unbundling and competitive supply of metering and billing services. As stated in both our September 13 RWG report Comments, and our September 30 DAWG Report Comments, the CEC believes that it is possible to support some unbundling of these services to permit ESPs to more effectively provide energy services to their customers by securing intermediate services from the UDC.

As described more fully in our RWG Comments of September 13, we believe that the CPUC should direct the RWG to develop a methodology that would permit UDCs to offer unbundled revenue cycle services at a fair and reasonable price to both end-use customers and ESPs, and that will ultimately permit some of these services to be provided competitively.

Unbundle Metering and Billing, but Permit Competitive Supply Over Time

Consistent with the CEC's position, other parties recognize the value of unbundling without, necessarily, the competitive supply of the unbundled services. For example, Working Assets requests the right to obtain billing services from the UDC at Working Assets' discretion. CellNet and ITRON also provide some rationale for considering various aspects of unbundling, but without competitive supply of the component services. ITRON provides estimates of the additional costs per customer of permitting multiple data communication systems, which increase costs substantially above a single universal system.

The CEC acknowledges that linked unbundling and competitive supply of these services (as well as others of the five described above) are desired by emergent energy service providers. However, the CEC believes that unbundling with continued monopoly supply by the UDC for a transition period until competitive supply can be better assessed is an acceptable strategy that allows direct access to move forward.

VII-3 What Services Might be Provided in Different Ways to Enhance Consumer Choice?

Advantages of a Monopoly Provision of Unbundled Services

CellNet asserts that metering (measurement, communication of data, and storage in a usage database) is intimately connected to the distribution function, and can be best supplied as a monopoly by the UDC. CellNet notes the appropriateness of monopoly provision of universal, low cost metering and data communication systems.

The CEC believes that the monopoly that provides these services need not be the UDC, and that the advantages which CellNet describes for monopoly provision of these are enhanced further when natural gas and water metering and data collection are included. The CEC has also described the benefits of a single consumption database, with usage data access the to all energy suppliers, that can enhance customers' abilities to change energy service providers with no hardware change at all. We have recommended further examination of these more complex options in our September 30 Comments.

ESP Use of UDC Services

Working Assets asserts that it is essential that the CPUC unbundle billing to allow energy service providers to bill their customers directly. Working Assets also support the option of UDC provision of consolidated billing on behalf of ESPs.

The CEC supported the option of UDC consolidated billing in its September 13 Comments on the RWG report. This option would lower the cost for customers electing direct access without raising costs for other customers and should be implemented.

VIII. CONSUMER EDUCATION

VIII-1Who coordinates the statewide effort?

It is important that consumers are made aware of the structural changes in the electricity market early in 1997. This effort needs to be coordinated by a single entity. SCE/PG&E state that "[t]he utilities are committed to working with the CPUC and interested consumer interest groups to fashion an effective program on consumer protection during 1997" (p. 18). DAN asserts that "[i]n order to prepare customers for the January 1, 1998 initiation, utilities must actually undertake an appropriately designed customer education campaign no later that October 1, 1997 (p. 21). UCAN

emphasizes that ". . . the educational campaign be a statewide, uniform campaign designed by an independent consultant retained by the three utilities, with access to the utilities; customer information" (p. 2).

The CEC urges the CPUC to begin addressing consumer education issues now. The early messages should be clear, informative and objective, explaining all options, including virtual direct access and contracts for difference. No one particular option should be emphasized over any other. Consumer education should begin primarily as a utility function under CPUC guidance, and should involve more diverse entities as the competitive market evolves.

VIII-2What objectives and content should be the basis for education?

DAN and UCAN propose that customers be informed of the following:

1. Companies other than the local utility will be offering electric service;
2. Customers will have the right to choose these other services or stay with the local UDC;
3. Customers will be responsible for understanding prices, risks and personal usage patterns;
4. UDC's will provide customers with personalized energy usage profiles;
5. The CPUC and others will provide customers with energy shopping information; and
6. Customers will be informed of their rights as prescribed in AB 1890.

DAN further believes that the consumer education effort should include a plan for incorporating community organization into the education effort and a description of tactics for implementing the plan, including: vehicles for delivering the communication (advertising, bill inserts, print, television/radio etc.); timetables with major milestones; and a budget (pp. 21-22).

The CEC recommends that the initial content of the educational materials should concentrate on the change in the structure of the industry. Customers need to be informed that companies other than the local utility will be offering electric service, that they will have the right to choose these services or stay with the local UDC, and if they stay with the UDC they will be able to choose virtual direct access with or without contracts for differences, or be billed at average rates; and that consumer information will be available from the CPUC and other market participants. The CPUC should develop guidelines, and possibly market rules if necessary, for advertising by ESPs that seeks customer participation in direct access program of ESPs.

IX. COST RECOVERY FOR IOU/UDC IMPLEMENTATION COSTS

The CEC supports IOU/UDC recovery of reasonable implementation costs as provided by § 376 of AB 1890. It is very important for the CPUC to give a direct signal to UDCs that legitimate and prudent costs will be recovered to avoid the kind of delays that have bedeviled the ISO/PX trust decisions. The Ratesetting Working Group should be charged with developing a proposal for revenue recovery commensurate with AB 1890 restrictions on prices and rates.

X. DEVELOPING A DIRECT ACCESS IMPLEMENTATION PLAN

Few parties offered comments on how the CPUC should take the mass of information in the DAWG Report and arrive at a detailed implementation plan. Among those who did, three basic approaches emerged: (1) working groups develop implementation details following CPUC policy decision on major issues; (2) utilities develop a conforming implementation plan, and (3) CPUC issue detailed rulings on all facets of direct access. The CEC supports the first approach.

The CEC specifically urges the CPUC to make decisions in nine areas as Phase 1 of a three phase process. As set forth in the Introduction to these Reply Comments, the major areas include:

(1) technical requirements justifying phase-in of direct access;
(2) customer participation requirements;
(3) treatment of aggregation;
(4) access to customer information;
(5) governance of market participants;
(6) metering, communication systems, information management;
(7) unbundling of the UDC distribution function;
(8) consumer education plans;
(9) cost recovery of UDC expenditures.

Phase 2 would consist of the working group process to develop the implementation plan(s) directed in phase 1. Phase 3 would provide for CPUC review of Phase 2 proposals and CPUC decisions.

We believe that a working group approach is superior because this will be an industry implementation plan, not an implementation plan limited to IOUs. Thus, all stakeholders should be involved in its development, not merely its review.

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Respectfully submitited,

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